

### REMARKS

The courteous interview granted to applicants' undersigned attorney and Dr. Gary Wentworth on April 12, 2006, is hereby acknowledged with appreciation. At the interview, the invention, the outstanding Office Action, and the prior art of record were thoroughly discussed. It was agreed at the interview that a new Declaration Under 37 C.F.R. §1.132 would be submitted pointing to unexpected results data presented in the specification. However, since it was discovered that there is no relevant data other than the data presented in the parent applications, no Declaration is being provided.

The objections to claims 8-13, 18, 20, 22 and 35 (paragraph 1 of the Office Action) and the rejections of claims 6-17, 27-29 and 48 under 35 U.S.C. §112 (paragraph 13 of the Office Action) have been obviated by appropriate claim amendments. Withdrawal of these objections and rejections is respectfully requested.

It was agreed at the interview of April 12, 2005 that the objection to claim 35, which contains CAS# of the claimed dimers, would be withdrawn since the CAS# is extremely specific and otherwise the ester mixture is not capable of a more precise definition since CAS# 61788-89-4 is a mixture of compounds (fatty acids, C-18-unsaturated dimers). Accordingly, it is submitted that the objection to claim 35 should be withdrawn.

New claims 49 and 50 are original claims 46 and 47 which were not rejected and, therefore, are allowable.

Claims 1-25 call for a combination of esters of formulas III and IV. Support for these combinations of esters is found at original claim 1 (any two or more of formulas I, II, III and IV); and elsewhere throughout the specification.

Enclosed is a proper terminal disclaimer to obviate all obviousness-type double patenting rejections. All applications and patents cited in the double patenting rejection were commonly owned with the assignee of this application at the time the invention in this application was made, as described in the terminal disclaimer pointing to the recorded assignments. Withdrawal of all double patenting rejections is respectfully requested.

### DATA

Upon review of the data of the specification, it was discovered that the compositions shown do not contain a reactive diluent. Accordingly, since applicants have no relevant data and the expense of generating such data is not commercially justifiable, applicants have not prepared an Affidavit or Declaration under 37 CFR §1.132. It is submitted, however, that the claims remain patentable for the reasons set forth below.

### PRIOR ART REJECTIONS

Claims 1-4, 6-8, 10, 13, 14, 18-22, 24, 34, 39-43 and 48 stand rejected under 35 U.S.C. §103(a) as unpatentable over D'Sidocky et al. (U.S. 5,985,963) in view of Oshiyama et al. (4,789,381) and Huynh-Tran et al. (U.S. 2003/0166743).

This rejection is predicated upon the obviousness of adding an ester from one reference (Oshiyama '381) into an adhesive resin containing rubber composition of another reference (D'Sidocky '963). As stated in the parent application, the addition of a lubricant where adhesion is required is completely non-obvious since the addition of a lubricant would be expected to lower adhesion.

It is stated in the first Office Action that "it is prime facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose." It is submitted that the esters of D'Sidocky and Oshiyama are, in fact, disclosed to be useful for opposite purposes, despite the fact that ultimately, both may be useful in a tire that contains tire cord. While Oshiyama uses applicants' claimed esters (Formulas I and II) to coat the tire cord during manufacture for lubricity to avoid fuzzing and breakage on account of increased friction, D'Sidocky's rosin esters are employed as a tackifier.

The alleged obviousness of combining one or more of applicants' claimed esters together with the adhesive resins on the basis that lubricants have been added to rubber compositions is most effectively negated, as explained at the May 7, 2004 interview in the parent application, based on the negative teachings of the Winstanley et al., U.S. Patent 3,654,007, ('007) attached as *Exhibit A*. "Lubricity" (Oshiyama) is essentially the opposite of "adhesion" (D'Sidocky). As disclosed in the Winstanley et al. '007 Patent, a lubricant is used in the construction of tires containing steel cords by "applying a lubricant in two spaced apart

circumferential bands around the first reinforcing layer." (Col. 1, Lines 20-21). In this manner, "relative slip between said layers is allowed by virtue of said bands of lubricant." (Col. 1, Lines 33-34). It is stated that the lubricant does not significantly affect the strength of adhesion of the rubber surfaces surrounding the lubricant (Col. 1, Lines 58-62):

"...after the molding and vulcanization of the tire the properties of the rubber surfaces between which the lubricant acts are not significantly effected, particularly the strength of adhesion between said surfaces."

The '007 Patent makes it quite clear why adhesion is not significantly affected by the lubricant, because **the lubricant is omitted where adhesion is required.** (Col. 2, Lines 55-57):

"...leaving a marginal portion of the chafer strip devoid of lubricant to enable adhesion to take place between the chafer strip 1 and a superposed carcass ply 2."

The Huynh-Tran '743 publication neither discloses nor suggests the addition of applicants' claimed esters to a rubber composition.

In view of this negative teaching, it is submitted that the prior art rejection should be withdrawn.

Claims 5 and 23 stand rejected under 35 U.S.C. §103(a) as unpatentable over D'Sidocky ('963) in view of Oshiyama ('381) and Solomon U.S. 4,448,813. This rejection should be withdrawn for the reasons stated above with reference to the combination of D'Sidocky and Oshiyama. Solomon neither discloses nor suggests any motivation for adding the **lubricating** esters of the Oshiyama ('381) patent to the D'Sidocky composition for the purpose of better adhesion.

Claims 5 and 23 stand rejected under 35 U.S.C. §103(a) as unpatentable over D'Sidosky ('963) in view of Oshiyama '381, Huynh-Tran ('743) and Solomon (U.S. 4,448,813). This rejection should be withdrawn for the reasons set forth above with respect to the non-obviousness of adding the Oshiyama '381 tire cord manufacturing lubricant to the D'Sidosky '963 rubber composition.

Claims 1-4, 6-8, 10, 13, 14, 18-22, 24, 26-27, 29, 34, 39-45 and 48 stand rejected under 35 U.S.C. §103(a) as unpatentable over Singh et al (U.S. 6,298,539) in view of EP 1,022,306 and Huynh-Tran et al. ('743). Claims 1, 2 and 42 (each of the above-rejected claims ultimately depends from 1, 2 or 42) have been amended to eliminate formula I. The ester disclosed in EP 1,022,306 is derived from linoleic acid and its reaction product with the disclosed alcohols results in a monoester, as in applicants' formula I. Since the rejected claims now are directed to di-esters and tri-esters, and there is no suggestion in the prior art to add these esters to the rubber composition, it is submitted that the rejection should be withdrawn.

It is submitted that all claims are of proper form and scope for allowance.  
Early and favorable consideration is respectfully requested.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 13-2855, under Order No. 27702/10047C-1 from which the undersigned is authorized to draw.

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Respectfully submitted,

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